

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method of production of a homopolymer or copolymer or homo-oligomer or co-oligomer product ~~characterised in that the product is obtained by~~ which comprises carrying out a condensation reaction of one or more a reactants consisting essentially of at least one reactant selected from the group consisting of diaminoanthracene, substituted diaminoanthracene, ~~or not, optionally with a diiminoanthracene and substituted diiminoanthracene or not in the absence of anthraquinone substituted or not~~ to produce said homopolymer or copolymer or homo-oligomer or co-oligomer product.

Claim 2 (original): A method as claimed in claim 1 characterised in that the condensation reaction is carried out under vacuum in the absence of any solvent.

Claim 3 (currently amended): A method as claimed in claim 1 characterised in that the condensation reaction is carried out in an aliphatic carboxylic acid ~~e.g. glacial acetic acid or pivalic acid.~~

Claim 4 (original): A method as claimed in claim 2 or claim 3 characterised in that the condensation reaction is carried out between a diaminoanthracene substituted or not with a diimino anthracene substituted or not.

Claim 5 (currently amended): A method as claimed in claim 1, ~~2, 3 or 4~~ characterised in that the substitution is such that the product is a homopolymer or homo-oligomer.

Claim 6 (currently amended): A method as claimed in claim 1, ~~2, 3 or 4~~ characterised in that the substitution is such that the product is a co-polymer or a co-oligomer.

Claim 7 (currently amended): A method as claimed in claim 1 ~~any one of claims 1 to 6~~ characterised in that the diaminoanthracene is a 9,10-diaminoanthracene.

Claim 8 (currently amended): A method as claimed in ~~any one of claims 1 to 7~~ claim 1 characterised in that the sole reactant is ~~DAA~~ diaminoanthracene.

Claim 9 (currently amended): A method as claimed in ~~any one of claims 1 to 6~~ claim 1 characterised in that the only reactants are one or more substituted ~~DAAs and DAA~~ diaminoanthracenes and diaminoanthracenes.

Claim 10 (currently amended): A method as claimed in ~~any one of claims 1 to 6~~ claim 1 characterised in that the only reactants are substituted ~~DAAs~~ diaminoanthracenes which may be the same or different.

Claim 11 (currently amended): A method as claimed in ~~any one of claims 1 to 6~~ claim 1 characterised in that the only reactants are ~~DAA and DIA~~ diaminoanthracene and diiminoanthracene.

Claim 12 (currently amended): A method as claimed in ~~any one of claims 1 to 6~~ claim 1 characterised in that the only reactants are one or more substituted ~~DAAs and DIA~~ diaminoanthracenes and diiminoanthracene.

Claim 13 (currently amended): A method as claimed in ~~any one of claims 1 to 6~~  
claim 1 characterised in that the only reactants are ~~DAA~~ diaminoanthracene and one or more  
substituted ~~DIAs~~ diiminoanthracenes.

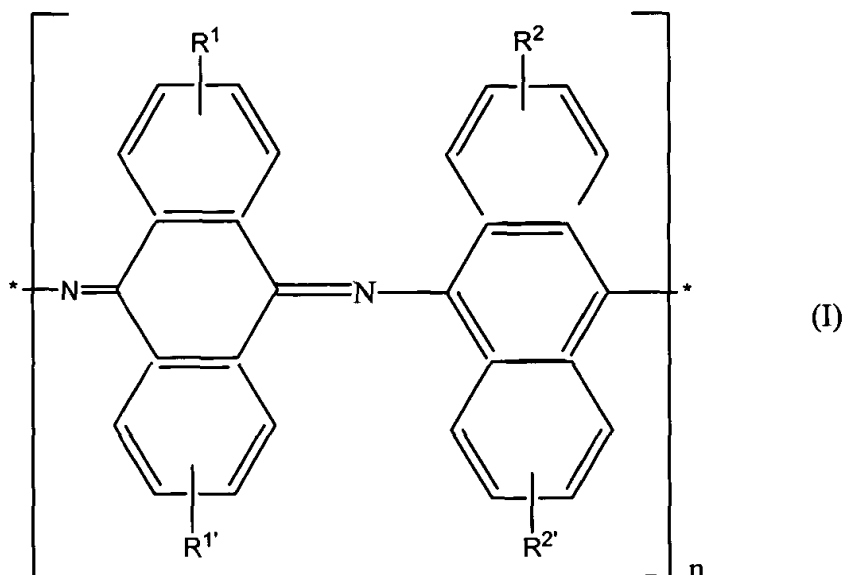
Claim 14 (currently amended): A method as claimed in ~~any one of claims 1 to 6~~  
claim 1 characterised in that the only reactants are one or more substituted ~~DAAs~~  
diaminoanthracenes and one or more substituted ~~DIAs~~ diiminoanthracenes.

Claim 15 (currently amended): A method as claimed in ~~any one of claims 11 to 14~~  
claim 11 characterised in that the ratio of ~~DAA to DIA~~ diaminoanthracene to  
diiminoanthracene is in the range 5:1 to 1:5.

Claim 16 (currently amended): A method as claimed in claim 15, characterised in  
that the ratio of ~~DAA to DIA~~ diaminoanthracene to diiminoanthracene is in the range 3:1 to  
1:3.

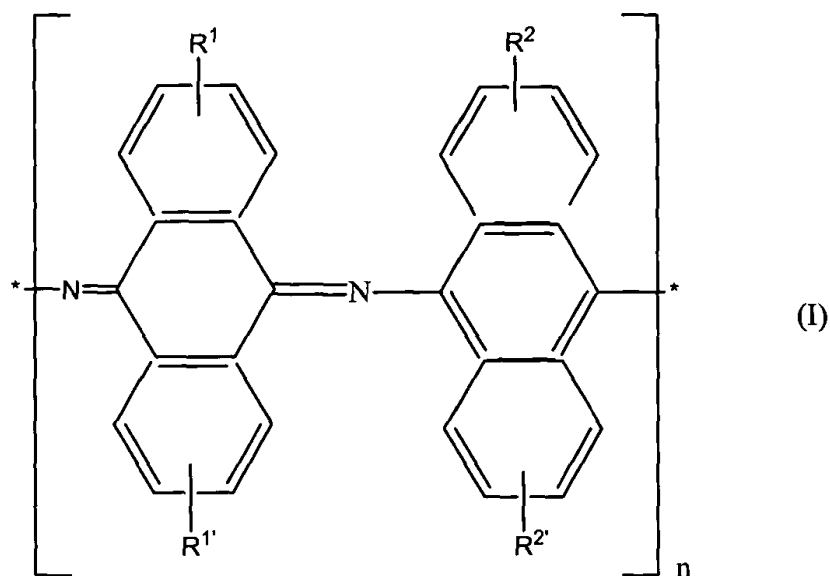
Claim 17 (currently amended): A method as claimed in claim 16, characterised in  
that the ratio of ~~DAA to DIA~~ diaminoanthracene to diiminoanthracene is in the range 2:1 to  
1:2.

Claim 18 (currently amended): A method as claimed in claim 1 characterised in that  
the product has the general formula I



where,  $R^1$  may be the same as or different ~~to~~ from  $R^{1'}$ , which may be the same as or different ~~to~~ from  $R^2$ , which may be the same as or different ~~to~~ from  $R^{2'}$  and each of  $R^1$ ,  $R^{1'}$ ,  $R^2$ , and  $R^{2'}$  is selected from the group consisting of a hydrogen atom, ~~or~~  $-CH_3$ ,  $CH_3CH_2-$ ,  $-OCH_3$ ,  $-OCH_2CH_3$ ,  $-CH_2OCH_3$ ,  $-CH_2OCH_2CH_2OCH_3$ , methoxyethoxyethoxymethyl, aryloxymethyl, phenyl, Cl, Br, CN, ~~or~~  $NO_2$ ,  $-CH_2COOR'''$ , ~~or~~  $-CH_2NHCOR'''$  (where  $R'''$  is  $C_1$ - $C_6$  alkyl, ~~or~~ a phenyl or biphenyl group), ~~or~~ a  $C_1$ - $C_5$  alkyl group, ~~or~~ an aryl group, ~~e.g.~~ a benzyl group, ~~or~~ an  $-SO_3H$  group, ~~or~~ a  $C_1$ - $C_5$  alkoxy group ~~or~~ and an  $H_2PO_3$  group, and  $R^1$  and  $R^{1'}$  are different from ~~to~~  $R^2$  and  $R^{2'}$  and  $n$  is an integer ranging from 2 to 100 ~~preferably 6 to 20.~~

Claim 19 (currently amended): A method as claimed in claim 1 characterised in that the product has the general formula I



where,  $R_1$  may be the same as or different to from  $R_{1'}$ , and each of  $R^1$  and  $R^{1'}$  is selected from the group consisting of a hydrogen atom, or  $-CH_3$ ,  $CH_3CH_2-$ ,  $-OCH_3$ ,  $-OCH_2CH_3$ ,  $-CH_2OCH_3$ ,  $-CH_2OCH_2CH_2OCH_3$ , methoxyethoxyethoxymethyl, aryloxymethyl, phenyl, Cl, Br, CN, or  $NO_2$ ,  $-CH_2COOR'''$ , or  $-CH_2NHCOR'''$  (where  $R'''$  is  $C_1$ - $C_6$  alkyl, or a phenyl or biphenyl group), and  $R^2$  may be the same or different to from  $R^{2'}$  and each of  $R^2$  and  $R^{2'}$  is independently selected from the group consisting of a hydrogen atom, or a  $C_1$ - $C_5$  alkyl group, or an aryl group, e.g. a benzyl group, or an  $-SO_3H$  group, or a hydroxyl group, or a  $C_1$ - $C_5$  alkoxy group, or and an  $H_2PO_3$  group, and  $R_1$  and  $R_{1'}$  are different from to  $R_2$  and  $R_{2'}$  and  $n$  is an integer ranging from 2 to 100 ~~preferably 6 to 20~~.

Claim 20 (original): A method as claimed in claim 18 or claim 19 characterised in that  $R^1$  is the same as  $R^{1'}$  but is different from  $R^2$  and  $R^{2'}$  and in that  $R^2$  and  $R^{2'}$  are the same.

Claim 21 (original): A method as claimed in claim 18 or claim 19 characterised in that  $R^1$  is the same as  $R^{1'}$  and as  $R^2$  and  $R^{2'}$  but is not hydrogen.

Claim 22 (original): A method as claimed in claim 18 or claim 19 characterised in that  $R^1$  is different from  $R^{1'}$  and  $R^2$  is different from  $R^{2'}$  and  $R^1$  and  $R^{1'}$  are both different from  $R^2$  and  $R^{2'}$ .

Claim 23 (currently amended): A method as claimed in ~~any one of claims 18 to 21~~ claim 18 or claim 19 characterised in that  $R^1$  and  $R^2$  are not hydrogen and in that  $R^{1'}$  and  $R^{2'}$  are not the same.

Claim 24 (currently amended): The polymeric or oligomeric condensation product obtainable from the condensation reaction of ~~an aromatic diamine with itself or a substituted form thereof or with a diimino version or a substituted version thereof~~, characterised in that the diamine is a one or more reactant consisting essentially of at least one reactant selected from the group consisting of diaminoanthracene, which is substituted diaminoanthracene, or is not substituted, and the diimino is diiminoanthracene, which is and substituted diiminoanthracene, where the condensation or not, and in that the reaction is by melting the reactant(s) under vacuum in the absence of solvent and in the absence of anthraquinone whether substituted or not to produce said polymeric or oligomeric condensation product.

Claim 25 (currently amended): The polymeric or oligomeric condensation product obtainable from the condensation reaction of ~~an aromatic diamine with itself or a substituted form thereof or with a diimino version or a substituted version thereof~~, characterised in that the diamine is a one or more monomeric reactants consisting essentially of at least one

monomeric reactant selected from the group consisting of diaminoanthracene, which is substituted diaminoanthracene or is not substituted, and the diimine is diiminoanthracene, which is and substituted diiminoanthracene or not, where the condensation and in that the reaction is carried out in solution in an aliphatic carboxylic acid in the absence of anthraquinone whether substituted or not to produce said polymeric or oligomeric condensation product.

Claim 26 (currently amended): The product as claimed in claim 25 characterized in that the aliphatic carboxylic acid is glacial acetic acid.

Claim 27 (currently amended): The product as claimed in claim 25 characterized in that the aliphatic carboxylic acid is pivalic acid.

Claim 28 (currently amended): A transparent electroconductive coating comprising a product made by a method as claimed in ~~any one of claims 1 to 23 or a product as claimed in claim 24, 25, 26 or 27~~ claim 1.

Claim 29 (currently amended): A static shielding material comprising a product made by a method as claimed in ~~any one of claims 1 to 23 or a product as claimed in claim 24, 25, 26 or 27~~ claim 1.

Claim 30 (currently amended): A display device which contains a layer characterised in that the said layer comprises a product made by a method as claimed ~~herein~~ in claim 1.

Claim 31 (original): A display device as claimed in claim 30 characterised in that the layer has a hole transporting function.

Claim 32 (new): A display device which contains a layer comprising the product of claim 24.

Claim 33 (new): A display device which contains a layer comprising the product of claim 25.

Claim 34 (new): The method according to claim 18 wherein n is 6 to 20.

Claim 35 (new): The method according to claim 19 wherein n is 6 to 20.

Claim 36 (new): The method of claim 3 wherein the carboxylic acid is glacial acetic acid or pivalic acid.

Claim 37. (new): A method according to claim 2 which comprises fusing 9,10-diaminoanthracene under a vacuum in the absence of a solvent and thereafter completing the condensation reaction.

Claim 38 (new): A method according to claim 37 wherein a soluble product is extracted from the condensation product employing acetone as an extractant.



Claim 39 (new): A method according to claim 2 which comprises fusing a mixture consisting of diaminoanthracene and diiminoanthracene under a vacuum in the absence of a solvent and thereafter completing the condensation reaction.

Claim 40 (new): A method according to claim 39 which comprises extracting the acetone soluble condensation product with acetone and recovering both the acetone extract and the acetone insoluble material.

Claim 41 (new): The method according to claim 3 wherein the reactants are a mixture of diaminoanthracene and diiminoanthracene.

Claim 42 (new): The method according to claim 2 which comprises fusing a mixture of diaminoanthracene and 2-t-butyl-9,10-diiminoanthracene and thereafter completing the condensation reaction.

Claim 43 (new): The method according to claim 42 wherein the reaction product is subjected to extraction with acetone and the acetone soluble extract is recovered.

Claim 44 (new): A method as claimed in claim 2, wherein the at least one reactant is selected from the group consisting of 9, 10-diaminoanthracene, substituted 9,10-diaminoanthracene, 9,10-diiminoanthracene and substituted 9,10-diiminoanthracene.

Claim 45 (new): A method as claimed in claim 3, wherein the at least one reactant is selected from the group consisting of 9,10-diaminoanthracene, substituted 9,10-diaminoanthracene, 9,10-diiminoanthracene and substituted 9,10-diiminoanthracene.